

A Taxonomic Study of the Ant Genus *Recurvidris* Bolton (Hymenoptera: Formicidae) from China, with Description of a New Species

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Abstract: A new species of the genus *Recurvidris* Bolton, *Recurvidris glabriceps* sp. nov. collected from south China is described. A key to Chinese known species of the genus based on worker caste is presented.

Key words: Hymenoptera, Formicidae, *Recurvidris*, new species, China

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The ant genus *Trigonogaster* was first described over a century ago by Forel, but the name is preoccupied by a pteromalid chalcid, so Bolton (1992) revised the genus and gave it the name *Recurvidris*^[1]. There are 8 species recorded in the Oriental and Indo-Australian regions^{[1]~[2]}, 2 species are recorded in China^{[2]~[4]}. When we studied the ant of South China, a new species was found. The description of the new species and a key to known species in China based on worker caste are as follows. The holotype is deposited in the Department of Biology, Guangxi Normal University, Guilin, and the paratype specimens are deposited in the Conservation Department, Kadoorie Farm and Garden, Hong Kong separately. The measurements and indices are as defined by Bolton (1987).

Key to known species of *Recurvidris* in China (worker caste)

1. Dorsum of head and disc of pronotum smooth and shining; basal mandiblar tooth (fourth tooth) acute apically *glabriceps* sp. nov.
Dorsum of head and disc of pronotum reticulate; basal mandiblar tooth (fourth tooth) bidenticulate apically 2
2. Petiole with a long anteroventral process *nuwa* Xu
Petiole with only a short, tooth-like process *recurvispinosa* (Forel)

Recurvidris glabriceps, sp. nov. (Figs. 1~3)

Worker holotype. TL 2.4, HL 0.53, HW 0.46, CI 86, SL 0.43, SI 93, PW 0.27,

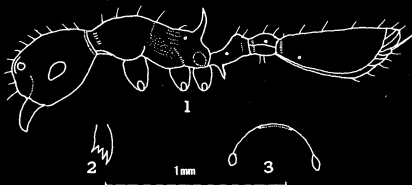
AL 0.72.

Apical margin of mandible with 4 teeth. Basal (fourth) tooth larger than tooth 3, acutely pointed; basal margin of mandible unarmed. Occipital corner rounded, the two sides and the occipital border of the head form a single arc in full face view. Dorsum of head and disc of pronotum smooth and shining, mesopleuron reticulate in most part, propodeal dorsum with only faint superficial sculpture. Recurved propodeal spines stout, with an indistinct infradental lamella. Petiole with a very long acute anteroventral process. Propodeal dorsum with a pair of short decumbent hairs which are far in front of the spiracle. Colour yellow.

Workers paratypes. TL 2.3~2.6, HL 0.51~0.53, HW 0.43~0.46, CI 84~86, SL 0.42~0.43, SI 91~97, PW 0.27~0.28, AL 0.67~0.75 (4 measured).

Holotype worker, Da Yao Shan of Guangxi, 25-Ⅱ-1998. Paratypes: 3 workers, same data as holotype; 3 workers, Da Ping Shan of Guangxi, 22-Ⅱ-1998; 1 worker, Xi Da Ming Shan of Guangxi, 17-X-1998; 3 workers, Wang Xia of Hainan, 5-Ⅳ-1998. All the type specimens were collected by John R. Fellowes.

This new species resembles *R. pickburni* Bolton, but differs from the later in the following characters: 1) head smooth and shining, not reticulate; 2) Petiole with a very long anteroventral process; and 3) propodeal spines stout. The shape of the mandibular teeth of both species above can distinguishes from all other known species from the Oriental and Indo-Australian regions.



Figs. 1~3 *Recurvitriss glabriceps*, sp. nov. worker
1. body in profile view; 2. mandibular teeth; 3. occipital outline

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中国角腹蚁属分类研究及一新种记述

(膜翅目：蚁科)

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本文记述华南地区角腹蚁属 1 新种, 光亮角腹蚁 *Recurvidris glabriceps* sp. nov.。新种与皮克氏角腹蚁 *R. pickburni* Bolton 相似, 但有如下不同: 头部及前胸背板光亮; 并胸腹节刺较粗; 结节具长的腹柄下突。文中还提供我国已知 3 种角腹蚁工蚁分种检索表。新种正模标本保存于广西师范大学生物系, 副模标本保存于嘉道理农场暨植物园和广西师范大学生物系。

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关键词: 膜翅目 蚁科 角腹蚁属 新种 中国